

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008659**Date Inspected:** 20-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wu Zhi Cheng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 5BW/5CW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW5A-013. The welder is identified as #202841 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231T.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW5A-014. The welder is identified as #220066 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231T.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW5A-011, 012. The welders are identified as #220069 and 220064 and were observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233T.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Segment 1AAW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG1E-875, 974, 843. The welder is identified as #220063 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-T-2234-C-U2-F for CWR666.

Segment 2AW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as BP199-001-037, 038 and BP310-001-005, 009. The welder is identified as #049769 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM.

This QA Inspector observed grinding of repair welds at the hold back areas on the side plate stiffener plates at the 2AW/1BW splice location, counter weight side.

This QA Inspector observed the measuring of the groove angles on the I-rib stiffener plates of the bottom plate with the use of a bridge cam gauge at the 2AW/1BW splice location.

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing (MT) of repair welds at the floor beam diaphragm to floor beam connection along panel point 15

Segment 1AAW/1AW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW1A-003, 002, 001, 004, 005. The welder is identified as #067571 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

Segment 1AW

This QA Inspector observed heat straightening in progress at weld joints SEG003B-050 and SEG003C-050 following HSR 1(B)-7416.

Segment 5BW

This QA Inspector observed the cutting of the CJP splice weld of the side plate to bottom plate connection between panel points 34 and 35 on the cross beam side using a mechanically guided torch. A hydraulic jack was used for the alignment of the plates after weld was cut.

Segment 3AW

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

This QA Inspector observed blasting in progress at the bolted splice connection components for the segment and cross beam bolted splice connection.

Segment 4AW

This QA Inspector observed blasting in progress of internal components of the segment.

ZPMC Quality Control (QC) Inspector is identified as Wang Li Yang. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
